



Canadian domestic price forecast September 30, 2014

Forecast commentary

Andrew Botterill
Senior Manager, Resource Evaluation & Advisory

Pride and projection

"Life can only be understood backwards; but it must be lived forwards." - Søren Kierkegaard

After publishing our price forecast, we often spend the following weeks closely watching the markets to see if our projections come to fruition. While no forecast can accurately predict prices with any high level of certainty, it is encouraging when the market forces and trends that we see in one quarter result in prices near to what was forecast in the next. Sometimes, however, unforeseen circumstances can drastically change the story. We saw this in the latest quarter when the natural gas futures market deflated just weeks after publishing our last forecast (June 30, 2014). At the time, we saw a strengthening of prices in April through June due to low storage volumes and strong demand. This, along with the encouraging performance of the futures markets, gave us confidence that both natural gas and oil prices would remain strong for the remainder of the year.

Unfortunately, for our gas weighted clients, and our self-esteem, the market has not followed suit. July started with Henry Hub gas prices at \$US4.29/Mcf (AECO = \$C4.35/Mcf), but by the end of September, natural gas prices were trading closer to \$US3.84/Mcf (AECO = \$C3.90/Mcf) – a decrease of more than 10 percent in just three months.

Seasonal supply and demand shifts have always been a consideration for our gas price forecasts. We often see a cyclical effect in natural gas prices as supply and demand move during hot and cold weather cycles. Figure 1 plots the last six years of monthly AECO natural gas prices to show how those prices historically move from month to month. Figure 2 shows how each of these prices have fluctuated either above or below the annual average throughout the year, on a quarterly basis.

Figure 1: AECO-C Spot (CAD/Mcf), Historical movement

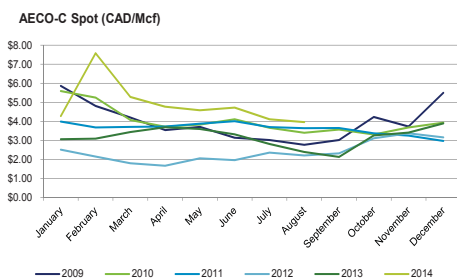
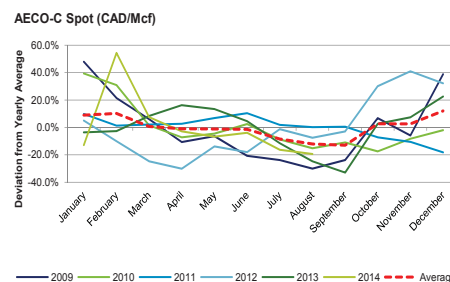


Figure 2: AECO-C Spot (CAD/Mcf), Quarterly fluctuations against annual average



On average (red dashed line), winter highs and summer lows are generally about 10 percent off the annual average. In years where there are extreme shifts, such as the bitter cold in the northeast U.S. in the winter of 2014, or the large oversupply issues of spring 2012, this difference from the yearly average can be as high as 50 percent and may not even follow the typical seasonal trend. The current gas price is approximately 20 percent lower than the average for all of 2014, much lower than is typical for this time of year. While it is important to consider the seasonality of gas prices, it is clear that other factors are just as significant.

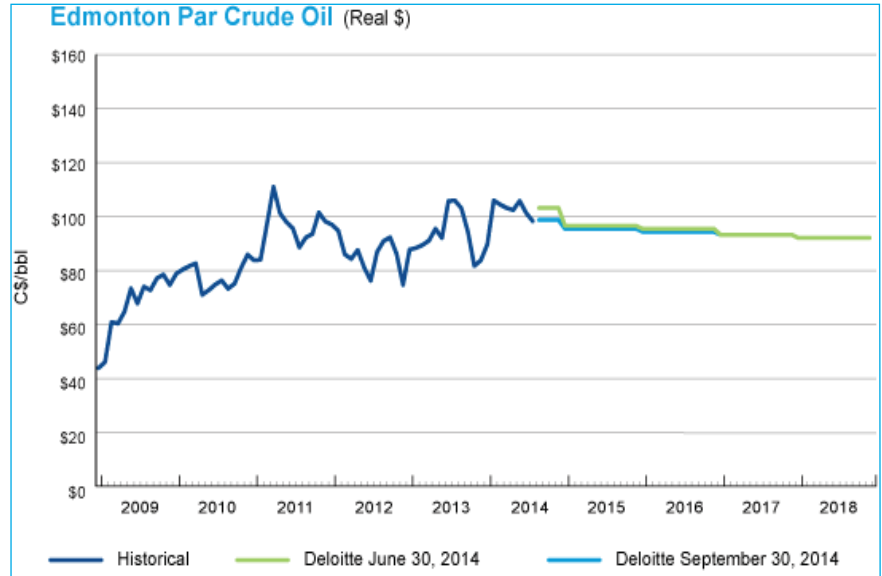
On the oil side of the ledger, there has been a significant reduction in the near term oil futures prices since our last forecast. Oil futures for 2014 have dropped from \$103.82/bbl on June 30, 2014 to \$91.24/bbl. At the same time, the long term futures in 2020 have stayed nearly constant, moving from \$87.54/bbl to \$86.63/bbl over the same period. This is likely due to rising U.S. production over the last several months, recently reaching the highest production rate since 1986. The addition of new infrastructure and increased refinery utilization in the States has also likely contributed to the flattening of the futures outlook.

This quarter's price forecast reflects a decrease in the near term for both oil and natural gas, with a more moderate outlook in the long term. As always, our pricing group is keeping a close eye on the market to estimate when the winds will shift going into the winter season.

Crude oil price and market demand forecast

Forecast comments

- On average, the differential between WTI and Edmonton Par has been around \$6/bbl in the first half of 2014, due to Canadian volumes of oil being backed out from the U.S. market. We have forecast this differential to be \$6/bbl for 2014, \$4/bbl in 2015, and \$3/bbl in 2016.
- In 2017, Deloitte is forecasting a return to the historical WTI to Edmonton Par differential of \$2/bbl, when pipeline and infrastructure constraints are expected to ease with further rail transport, and major pipeline reconfigurations and optimizations.
- Edmonton Par price is used as the basis to arrive at the remaining crude reference points. Offsets are based on five-year historical statistics with recent data weighted more heavily in the determination.
- Adjustments for oil consider the most recent pipeline tariffs and exchange rates to arrive at a Canadian Edmonton Par equivalent price.

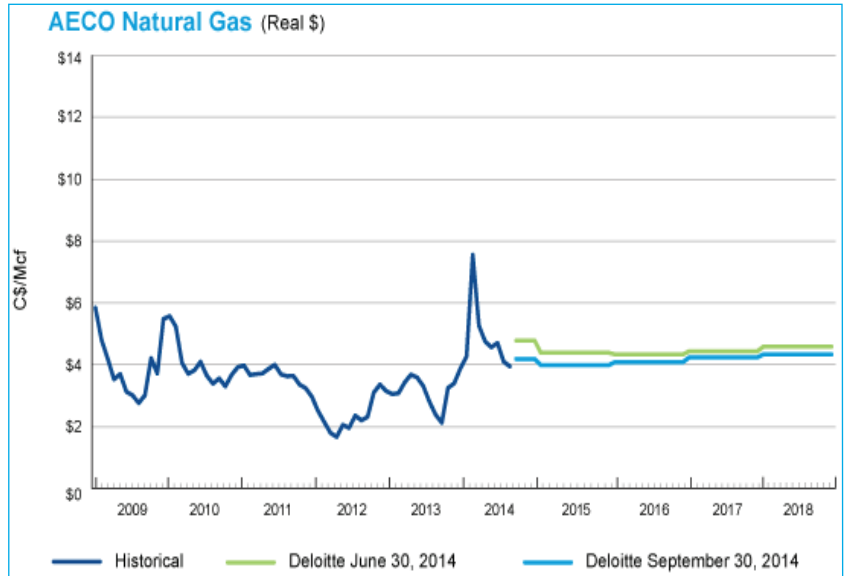


Year	WTI Cushing, OK (40 Deg. API) US\$/bbl Real	WTI Cushing, OK (40 Deg. API) US\$/bbl Current	Canadian Par Edmonton, AB (40 Deg. API) C\$/bbl Real	Canadian Par Edmonton, AB (40 Deg. API) C\$/bbl Current	Bow River Oil Hardisty, AB (25 Deg. API) C\$/bbl Current	Heavy Oil Hardisty, AB (12 Deg. API) C\$/bbl Current	Cost inflation Rate	CAD to USD exchange Rate
Historical								
2011	\$100.18	\$94.88	\$100.87	\$95.54	\$78.42	\$69.60	0.029	1.012
2012	\$96.47	\$94.11	\$88.74	\$86.57	\$74.41	\$64.07	0.015	1.001
2013	\$98.84	\$97.91	\$94.24	\$93.36	\$76.29	\$65.49	0.009	0.972
2014								
9 Months H	\$100.16	\$100.16	\$101.26	\$101.26	\$86.13	\$77.57	0.019	0.913
3 Months F	\$95.00	\$95.00	\$98.90	\$98.90	\$83.90	\$73.90	0.000	0.900
Avg.	\$98.87	\$98.87	\$100.67	\$100.67	\$85.57	\$76.65	-	0.910
Forecast								
2014	\$95.00	\$95.00	\$98.90	\$98.90	\$83.90	\$73.90	0.000	0.900
2015	\$90.00	\$91.80	\$95.55	\$97.45	\$82.15	\$71.95	0.020	0.900
2016	\$88.00	\$91.55	\$94.45	\$98.25	\$82.65	\$72.25	0.020	0.900
2017	\$86.00	\$91.25	\$93.35	\$99.05	\$83.15	\$72.55	0.020	0.900
2018	\$85.00	\$92.00	\$92.20	\$99.80	\$83.55	\$72.75	0.020	0.900
2019	\$85.00	\$93.85	\$92.20	\$101.80	\$85.25	\$74.20	0.020	0.900
2020	\$85.00	\$95.70	\$92.20	\$103.85	\$86.95	\$75.70	0.020	0.900
2021	\$85.00	\$97.65	\$92.20	\$105.90	\$88.70	\$77.20	0.020	0.900
2022	\$85.00	\$99.60	\$92.20	\$108.05	\$90.45	\$78.75	0.020	0.900

Natural gas price and market demand forecast

Forecast comments

- The NYMEX to Canadian AECO price historical differential is used to arrive at the AECO forecasted price.
- In Deloitte's most recent price forecast, we decreased 2014 prices by \$0.40/Mcf.
- In contrast to other forecasts in the industry, Deloitte's long-term views consider two more years of growth in terms of real dollars.



Year	AB Ref. Avg. Price	AB AECO Avg. Price	AB AECO Avg. Price	BC Direct Station 2 Sales	NYMEX	NYMEX
	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	US\$/Mcf	US\$/Mcf
	Current	Real	Current	Current	Real	Current
Historical						
2011	\$3.46	\$3.83	\$3.63	\$3.34	\$4.22	\$4.00
2012	\$2.25	\$2.45	\$2.39	\$2.29	\$2.82	\$2.75
2013	\$2.98	\$3.20	\$3.17	\$3.08	\$3.76	\$3.73
2014						
9 Months H	\$4.45	\$4.85	\$4.85	\$4.72	\$4.62	\$4.62
3 Months F	\$4.05	\$4.35	\$4.35	\$4.25	\$4.20	\$4.20
Avg.	\$4.35	\$4.72	\$4.72	\$4.60	\$4.52	\$4.52
Forecast						
2014	\$4.05	\$4.35	\$4.35	\$4.25	\$4.20	\$4.20
2015	\$3.75	\$4.00	\$4.10	\$4.00	\$4.00	\$4.10
2016	\$3.95	\$4.10	\$4.25	\$4.15	\$4.10	\$4.25
2017	\$4.25	\$4.30	\$4.55	\$4.45	\$4.25	\$4.50
2018	\$4.45	\$4.40	\$4.75	\$4.65	\$4.35	\$4.70
2019	\$4.65	\$4.50	\$4.95	\$4.85	\$4.45	\$4.90
2020	\$4.85	\$4.60	\$5.20	\$5.05	\$4.55	\$5.10
2021	\$5.15	\$4.80	\$5.50	\$5.40	\$4.70	\$5.40
2022	\$5.40	\$4.90	\$5.75	\$5.60	\$4.80	\$5.60



Pricing philosophy

Deloitte looks to both the futures and the past when we create our forecasts. Price forecasting takes into account many variables that can influence future prices. While experience tells us we must continually review the tools we use to predict future oil and gas prices, one constant is the impact that the geopolitical landscape has on pricing. This impact is most accurately reflected in the financial industry's futures market for commodities. That is why the futures market is the main influence in the creation of Deloitte's price forecast.

At Deloitte, we understand that sound analysis of changing trends can influence the decisions made about mergers, acquisitions, divestitures and investments. One of the ways we ensure our price forecasts are as accurate as possible is to review our pricing assumptions on a quarterly basis. Accurate and realistic information ensures better long-term decisions for our clients.

These forecasts are Deloitte's best estimate of how the future will look. In preparing the price forecast, Deloitte considers the current monthly trends, the actuals and trends for the year to date, and the prior year actuals in determining the forecast. The base forecast for both oil and gas is based on NYMEX futures in U.S. dollars. Crude oil and natural gas forecasts are based on yearly variable factors weighted to a higher percentage for the current data and then reflecting a higher percentage to prior year historical data for the later years. Gas prices have been determined independently from oil prices but still reflect the current competitive nature of the two fuels and reflect historical oil-to-gas ratios for the latter years of the gas forecast.

Deloitte prepares our price and market forecasts based on information we collect from numerous government agencies, industry publications, oil refineries, natural gas marketers and industry trends. Inflation forecasts and exchange rates have also been considered.

While these forecasts are considered reasonable, changing market conditions or additional information may require alteration from the indicated effective date.

Glossary

Some of the words, phrases and acronyms we use frequently when talking about pricing are listed below:

AECO	Alberta Energy Company - historical name of a virtual trading hub on the NGX system
ANS	Alaska North Slope
ASCI	Argus Sour Crude Oil
AWB	Access Western Blend - Canadian condensate/bitumen mix
BR	Bow River Crude Oil
CBOT	Chicago Board Of Trade
CGA	Canadian Gas Association
DCQ	Daily Contract Quantity
EIA	Energy Information Administration
FERC	US Federal Energy Regulatory Commission
FOB	Free on Board (shipper term)
IEA	International Energy Administration
LLB	Lloydminster Blend Crude Oil
LNG	Liquefied Natural Gas
MESC	Middle East Sour Crude
MSO	Mixed Sour Crude Oil
MSW	Canadian Light Sweet
NEB	Canadian National Energy Board
NIT	Nova Inventory Transfer
NYMEX	New York Mercantile Exchange
OECD	Organization of Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PADD	Petroleum Administration Defense District
USGC	US Gulf Coast
USWC	US West Coast
WCS	Western Canada Select Crude Oil
WTI	West Texas Intermediate
WTS	West Texas Sour

Deloitte
Bankers Court
700, 850 - 2 Street SW
Calgary AB T2P 0R8
Canada

Tel: 403-267-1700
Fax: 587-774-5398

www.ajmdeloitte.ca

No representation or warranty of any kind (whether expressed or implied) is given by Deloitte LLP as to the accuracy, completeness, currency or fitness for any purpose of this document. As such, this document does not constitute the giving of investment advice, nor a part of any advice on investment decisions. Accordingly, regardless of the form of action, whether in contract, tort or otherwise, and to the extent permitted by applicable law, Deloitte LLP accepts no liability of any kind and disclaims all responsibility for the consequences of any person acting or refraining from acting in reliance on this price forecast in whole or in part. This price forecast is not for dissemination in the United States or for distribution to United States wire services.

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services. Deloitte LLP, an Ontario limited liability partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited. Deloitte operates in Quebec as Deloitte s.e.n.c.r.l., a Quebec limited liability partnership.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

© Deloitte LLP and affiliated entities.